

The Assabet River Is On The Mend

New Phosphorus Discharge Permits for Area Wastewater Plants Aim to Curtail Vegetation Growth in River

High phosphorus levels have lead in recent years to the proliferation of floating and submerged vegetation along the 31-mile-long Assabet River, leaving it unsuitable for swimming, fishing and boating, and choking out fish and aquatic animals. In summer months, decaying algal blooms resulted in odors too strong for people to be able to enjoy the river. With the announcement of stricter limits on the amount of phosphorus discharged into the river from four municipal wastewater treatment plants, a key milestone has been reached in the effort to restore balance to the Assabet River eco-system.



Creative Partnership Addresses Ecological Challenge

Starting in 1998, preliminary evaluations conducted by MassDEP and the Organization for the Assabet River (OAR) – a non-profit river advocate – indicated that excessive vegetative growth was causing serious water quality problems in the river. Analysis showed that during low-flow conditions the four major wastewater facilities serving six communities accounted for 60-80% of the river flow, and up to 97% of the phosphorus entering the river.

The six communities that discharge wastewater into the river - Hudson, Marlborough, Maynard, Northborough, Shrewsbury and Westborough - organized themselves as the Assabet River

Consortium and partnered with OAR, MassDEP and the U.S. Environmental Protection Agency (USEPA) to address the ecological problems in the river. Between 1999 and 2004, this innovative partnership leveraged approximately \$4 million from a variety of federal, state, local and nonprofit sources for this effort.

Looking at the cumulative impacts of wastewater discharges along the entire river, the Consortium worked collaboratively with local environmental organizations, MassDEP and the USEPA to develop a broader understanding of the ecological challenges in the river. This collaborative approach allowed all the parties to achieve an important breakthrough.

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In May of 2006 MassDEP and USEPA issued joint permits containing a phosphorus limit of 0.1 milligram per liter for the four major municipal wastewater treatment plants discharging in the river, among the most protective phosphorus limits in the country. Achieving the 0.1 milligram per liter limit at the four municipal wastewater facilities will reduce phosphorus levels by 87% from the level of discharges to the river in 1998.

Future Work To Build Upon Assabet Milestone

The strict limits on phosphorus discharges in these permits represent an important milestone for the restoration of the Assabet River ecosystem, but there is more work to be done. To meet the 0.1 milligram per liter limit, design work is underway and construction at the treatment facilities will commence soon. The collaborative partnerships that helped reach this milestone will need to continue working together to address additional challenges, such as ensuring ongoing monitoring of the river, and evaluating and developing solutions to the issues of phosphorus in river sediments and the impacts of dams on the river.

Continuing the work of these collaborative partnerships and implementing strict environmental standards will allow the communities of the Assabet River watershed to balance the many uses of the river and to achieve improvements in water quality while allowing for future growth.

Cases Closed

MassDEP Adjudicatory Appeals Case Reform Cuts Time To Resolve Cases, Hikes Number of Cases Closed Each Year

The MassDEP Prescreening Program for administrative appeals has been a success during the first 28 months of its implementation, dramatically reducing the time it takes to resolve the majority of cases and increasing the total number of cases closed each year.



Beginning in January 2004, MassDEP implemented a number of changes designed to speed up the resolution of administrative appeals. The Prescreening Program administered by MassDEP's Office of Appeals and Dispute Resolution is at the heart of the recent changes to the adjudicatory process.

Under the prescreening program, one of MassDEP's Presiding Officers reviews every new appeal within 30 days, explores early resolution with the parties, and offers alternative dispute resolution services to assist the parties in resolving the appeal. Cases unresolved after prescreening are transferred to the Massachusetts Division of Administrative Law Appeals (DALA) for further adjudicatory proceedings.

Pilot implementation of the Prescreening Program began in January 2004 based on the recommendations of the Hearing Reform Advisory Committee. The prescreening process was formalized in amended adjudicatory hearing rules effective January 1, 2005.

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More cases are closing; cases are closing faster

Results from the first two years of the Prescreening Program show that it has been very effective in both achieving faster resolutions to adjudicatory appeals and increasing the total number of cases closed.

Since the institution of prescreening in 2004, the number of cases resolved within 180 days of filing has increased from 22 percent to 67 percent. Increasing the number of cases that are resolved early not only benefits the parties involved, it also allows other cases requiring further adjudication to move forward through the litigation process more efficiently.

During 2005, the first full year of implementing prescreening with the regulatory changes in place, the number of cases closed increased by 60 percent over the number of cases closed in 2004, and by 74 percent over the number of cases closed in 2003.

And, in 2005, for the first time since 1998, the number of cases closed exceeded the number of cases filed. MassDEP achieved this increased rate of case closure despite a 36 percent increase in the number of appeals filed in 2005 compared to 2003. The increased number of appeals filed is primarily attributable to MassDEP's enhanced enforcement efforts in recent years.

All in the numbers

The following are MassDEP and DALA case results, as of May 1, 2006:

- 561 cases have been through the prescreening process at MassDEP since January 20, 2004.
- 299 cases have been closed since prescreening began; 210 closed by MassDEP and 89 closed by DALA.
- 262 cases are still open; 164 of those cases are pending at DALA.
- 98 cases are still pending at MassDEP; 43 have been stayed awaiting final decisions from Superior Court on local wetlands bylaw decisions or the federal Environmental Protection Agency appeals process.
- 54 cases are in the MassDEP prescreening process, and all have been in prescreening for less than 90 days.

For more information on the MassDEP Prescreening Program, check out the MassDEP web site at: <http://mass.gov/dep/service/appeals.htm>

Unique MassDEP Study Confirms Integrity of Lab Test Data

'Double-Blind' Analysis Shows That Hazardous Waste Cleanup and Assessment Data is Reliable

By Amy O'Brien

What if laboratories hired to test soil and groundwater samples in the Commonwealth were submitting inaccurate data to the Massachusetts Department of Environmental Protection (MassDEP)? What if the decision to cleanup or close a hazardous waste site was based on inaccurate data? How could MassDEP be certain that the data being used in these decisions is reliable?

Elementary – begin by hiring the most qualified proficiency testing provider available to conduct a double-blind study and find out. This is just what MassDEP did between 2004 and 2005 when they contracted with Environmental Resource Associates (ERA) of Arvada, Colorado.

Can MassDEP, bankers, developers, local officials and the general public rely on the data generated by commercial laboratories? The answer, according to the results of the double-blind study, is “yes.”



MassDEP's first challenge was to find a way to evaluate the labs without the labs knowing they were being tested, which is the very nature of a double-blind study. So like any modern-day Sherlock Holmes, ERA created a script, several mock environmental consulting companies, and a third-party billing process to make study samples appear no different from any of the other samples laboratories receive on a regular basis – all part of a day's work. About 20 labs were selected, based on the volume of work they conduct on Massachusetts Contingency Plan-related sites (for a list of labs tested, please see the complete study report on the MassDEP website at: www.mass.gov/dep/cleanup/dbl-blnd.pdf 390 KB). MassDEP's Wall Experiment Station (WES) in Lawrence was also tested as part of the study.

With a magnifying glass in hand (and perhaps a trench coat and hat), ERA manufactured contaminated soil and groundwater samples and sent them to the labs to see whether or not they would reach the proper conclusions while analyzing Volatile Organic Compounds (VOC). The results of the study showed that the vast majority of labs were able to consistently analyze most samples within 20 percent of the actual value – well within the most stringent acceptance criteria in use by the testing industry.

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MassDEP regulates the cleanup of contaminated sites under a privatized program begun in 1993. In the past 12 years, over 20,000 sites have been assessed and cleaned up under this system. However, assessment and cleanup decisions are based upon test data from labs that are not specifically approved or monitored for this work. That has led to concerns over the quality of the analytical data used to support site cleanup decisions.

“Given these findings, MassDEP believes the public can have confidence in the integrity of the commercial laboratory community, and in the accuracy of the analytical data used to confirm cleanup of sites contaminated with VOCs, which are among the most pervasive and problematic pollutants at hazardous waste sites,” said MassDEP Commissioner Robert W. Golledge Jr.

The MassDEP double-blind study is believed to be one of the largest “undercover” investigations of analytical testing laboratories ever conducted in the United States.

For a full report on this double-blind lab evaluation program, go to MassDEP’s website at:
www.mass.gov/dep/cleanup/dbl-blnd.pdf



Massachusetts Department of
Environmental Protection
One Winter Street
Boston, MA 02108-4746

Commonwealth of
Massachusetts
Mitt Romney, Governor
Kerry Healey, Lt. Governor

Office for
Commonwealth Development
Andrew Gottlieb, Chief

Executive Office of
Environmental Affairs
Stephen R. Pritchard, Secretary

Department of
Environmental Protection
Robert W. Golledge Jr.,
Commissioner